Apprenticeship and Industry Training

Baker

Apprenticeship Course Outline

2400 (2000)

Government of Alberta

Apprenticeship and Industry Training

BAKER

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Care has been taken to acknowledge all sources and references in these materials. If there are any inadvertent omissions, please contact Alberta Learning, 10th floor, Commerce Place, Edmonton, Alberta, Canada, T5J 4L5.

Apprenticeship and Industry Training System

Apprenticeship is post-secondary education with a difference. It helps ensure Alberta has a steady supply of highly-skilled employees, the foundation of our economy's future health and competitiveness.

Apprentices in more than 50 trades and crafts spend between one and four years learning their trade - 80% of the time on-the-job under the supervision of a certified journeyman or qualified tradesperson. The balance of the program is technical training in the theory, skills and technologies of their trade.

To become certified journeymen, apprentices must learn theory and skills, and they must pass examinations. Requirements for certification - including the content and delivery of technical training - are developed and updated by the Alberta Apprenticeship and Industry Training Board (the Board) and a network of local and provincial industry committees.

The graduate of the Baker apprenticeship training is a journeyman who will be able to:

- prepare and bake all types of high quality yeast raised products in commercial quantities.
- produce and decorate various types of cakes, cookies and pastries commonly available in commercial bakeries.
- use efficiently and safely all hand and power operated equipment available in modern bakeries.
- practice good housekeeping procedures and maintain high levels of sanitation.
- apply the basics of management, costing and business controls.

While Alberta's apprenticeship system is supported by government, it is driven by industry (a term which includes both employers and employees). The Board steers the system, but the system relies on a network of local and provincial apprenticeship committees (LACs and PACs), representing the interests of each of more than 50 trades and crafts. Partners in the apprenticeship system play critical roles through the local and provincial committees within each trade.

Local Apprenticeship Committees (LAC)

Wherever there is activity in a trade, the Board can set up a LAC. The Board appoints equal numbers of employees and employers for terms of up to three years. The committee appoints a member as presiding officer. LACs:

- monitor the apprenticeship system, and the progress of apprentices in their trade, at the local level
- help settle certain kinds of issues between apprentices and their employers
- recommend improvements in apprenticeship training and certification to their trade's provincial apprenticeship committee
- make recommendations to the Board regarding the appointment of members to their trade's PAC.

Provincial Apprenticeship Committees (PAC)

The Board establishes a PAC for each trade and, based on PAC recommendations, appoints a presiding officer and equal numbers of employees and employers for terms of up to three years. Most PACs have nine members. PACs:

- identify the training needs and content for their trade
- recommend to the Board the standards for training and certification for their trade
- monitor the activities of local apprenticeship committees in their trade
- make recommendations to the Board about the designation of trades and occupations
- determine whether training of various kinds is equivalent to training provided in an apprenticeship program in the trade
- may participate in resolving any apprenticeship-related disputes between employers and employees

Baker P.A.C. Members

Mr. B. Seaman	Calgary	Presiding Officer
Mr. D. Brubaker	Calgary	Employee
Mr. A. Purchase	Calgary	Employee
Mr. J. Hulkenberg	Calgary	Employer
Mr. D. Ross	Calgary	Employer
Mr. M. Hooimeyer	Edmonton	Employer
Mr. A. Sturwold	Edmonton	Employer
Mr. A. Bron	Edmonton	Employee
Mr. Robert Wyatt	Edmonton	Employee

The Alberta Apprenticeship and Industry Training Board (Board)

The 13 members of the government appointed Board are aware of the training and certification needs of trades people and employers. Many Board members have previously served on an LAC or PAC. The Board:

- responds to industry's needs
- sets training and certification standards in all trades
- approves the technical training to be delivered by training establishments
- encourages the development of alternate methods of technical training delivery
- makes recommendations to the Minister of Alberta Learning about the designation of trades and occupations
- creates LACs, PACs, and appoints their members
- advises the Minister on the labour market's need for skilled and trained workers

Safety Education

Safe working procedures and conditions, accident prevention and the preservation of health are of primary importance in apprenticeship programs in Alberta. These responsibilities are shared and require the joint efforts of employers and employees. Safe learning experiences and environments can be created by controlling the variables and behaviours that may contribute to or cause an accident or injury.

It is generally recognised that a safe attitude contributes to an accident free environment. Everyone will benefit as a result of a healthy safe attitude towards prevention of accidents.

A tradesperson may be exposed to more hazards than others in the work force. Therefore, tradespersons should be familiar and comply with the Occupational Health and Safety Act and Regulations respecting personal safety and the safety in the work place.

Legal and Administrative Aspects of Safety

Accident prevention and the provisions of safe working conditions are the responsibilities of an employer and employee.

Employer's Responsibilities:

The employer is responsible for:
- provision and maintenance of safety equipment.
- provision of protective devices and clothing.
- enforcement of safe working procedures.
- safeguards for machinery, equipment and tools.
- observance of all accident prevention regulations.
- training of employees in safe use and operation of equipment.

Employee's Responsibilities:

The employee is responsible for:
- working in accordance with the safety regulations pertaining to job environment.
- working in such a way as not to endanger themselves or fellow employees.

Technical Training Establishments

The Baker apprenticeship training program is offered by Alberta Learning, Apprenticeship and Industry Training. Staff and facilities for delivering the program are supplied by:

- Northern Alberta Institute of Technology
- Southern Alberta Institute of Technology

Procedures for Recommending Revisions to the Course Outline

This course outline has been prepared by the Industry Programs and Standards of the Apprenticeship and Industry Training in partnership with the Provincial Apprenticeship Committee for the trade.

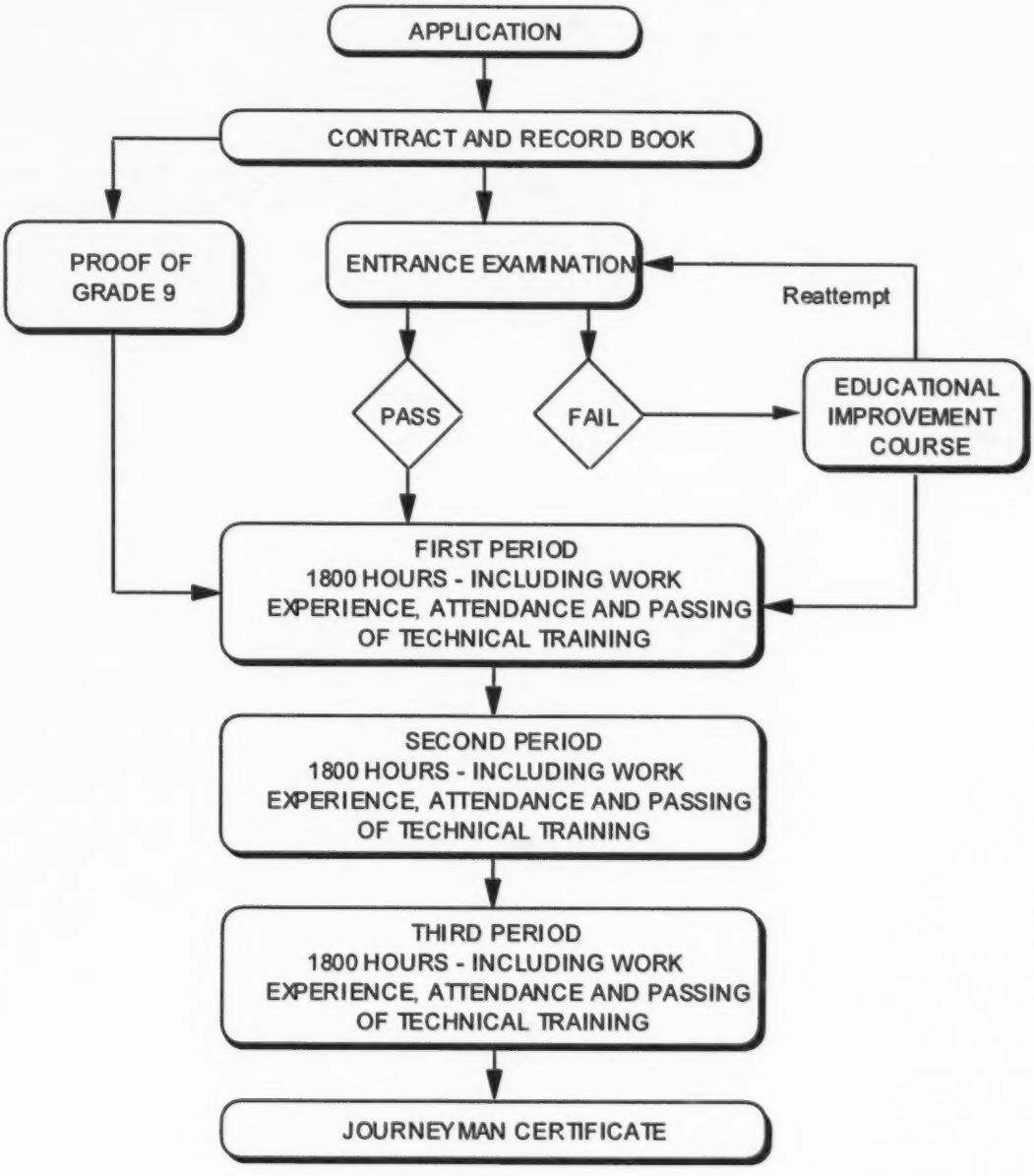
This course outline was approved on April 17, 2000 under the authority of the Alberta Apprenticeship and Industry Training Board on a recommendation from the Provincial Apprenticeship Committee. Valuable input is acknowledged from industry and the institutes.

Any concerned citizen or group in the Province of Alberta may make recommendations for change by writing to:

Apprenticeship and Industry Training
Industry Programs and Standards
10th floor, Commerce Place
10155 - 102 Street
Edmonton, AB T5J 4L5

It is requested that recommendations for change refer to specific areas and state references used. Recommendations received will be placed before regular meetings of the Provincial Apprenticeship Committee.

Apprenticeship Route Toward Certification


APPLICATION
CONTRACT AND RECORD BOOK
PROOF OF GRADE 9
ENTRANCE EXAMINATION
Reattempt
PASS
FAIL
EDUCATIONAL IMPROVEMENT COURSE
FIRST PERIOD
1800 HOURS - INCLUDING WORK EXPERIENCE, ATTENDANCE AND PASSING OF TECHNICAL TRAINING
SECOND PERIOD
1800 HOURS - INCLUDING WORK EXPERIENCE, ATTENDANCE AND PASSING OF TECHNICAL TRAINING
THIRD PERIOD
1800 HOURS - INCLUDING WORK EXPERIENCE, ATTENDANCE AND PASSING OF TECHNICAL TRAINING
JOURNEYMAN CERTIFICATE

Baker Training Profile

First Period
(8 Weeks 30 Hours Per Week - Total of 240 Hours)

SECTION ONE

THEORY OF BAKING — **56 Hours**

A	B	C
Related Activities	Introduction	Ingredient Theory
D	**E**	
Methods Theory	Theory Subjects	

SECTION TWO

SHOP PRACTICES — **128 Hours**

SECTION THREE

TRADE CALCULATIONS — **16 Hours**

A
Math

SECTION FOUR

SANITATION — **24 Hours**

A	B	C
Introduction	Properties of Food	Main Groups of Micro-Organisms Associated with Food
D	**E**	**F**
Causes, Effects and Control of Food Borne Illness	Quality Assurance/Quality Control	Regulations

SECTION FIVE

COMMUNICATIONS — **16 Hours**

A	B	C
Listening	Two Way Communication	One Way/Two Way Communication
D	**E**	**F**
Communication Barriers	Customer Service	Effective Telephone Techniques

Second Period
(8 Weeks 30 Hours Per Week - Total of 240 Hours)

SECTION ONE

THEORY OF BAKING — **56 Hours**

A	B	C
Ingredients Theory	Methods Theory	Theory Subjects

SECTION TWO

SHOP PRACTICES — **144 Hours**

SECTION THREE

TRADE CALCULATIONS — **16 Hours**

- A: Math

SECTION FOUR

SANITATION — **8 Hours**

- A: Review Sanitation
- B: Food Preservation
- C: Microbial Spoilage of Baked Goods
- D: Sanitation Control

SECTION FIVE

COMMUNICATIONS — **16 Hours**

- A: Positive Attitudes
- B: Self Confidence
- C: Defensive Communications
- D: Assertive Communications
- E: Dealing with the Angry Customer
- F: Employee-Employer Relations
- G: Job Seeking Skills

Third Period
(8 Weeks 30 Hours Per Week - Total of 240 Hours)

SECTION ONE

THEORY OF BAKING — **64 Hours**

- A: Ingredients Theory
- B: Methods Theory
- C: Production Techniques Theory
- D: Theory Subjects

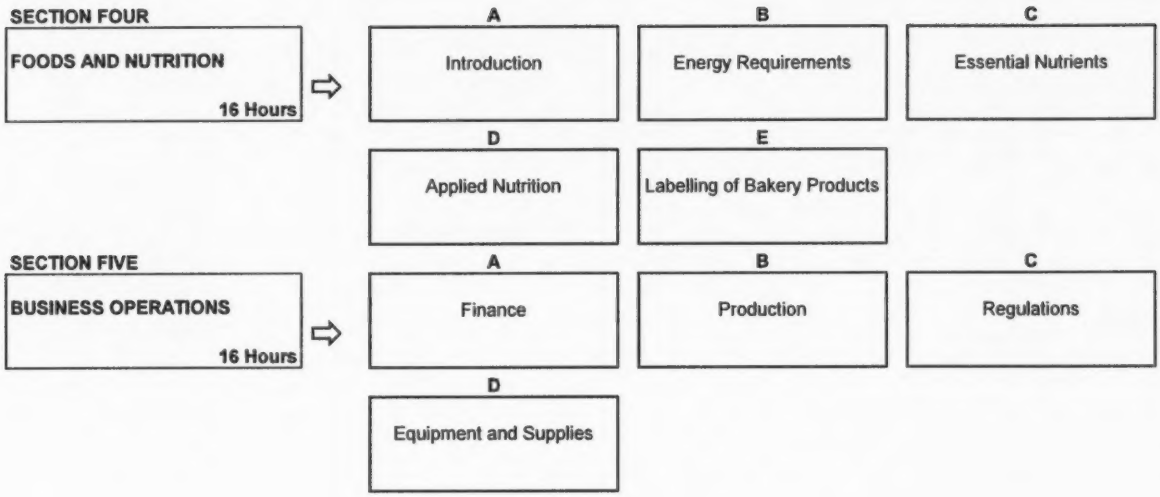
SECTION TWO

SHOP PRACTICES — **120 Hours**

SECTION THREE

EQUIPMENT AND SAFETY — **24 Hours**

- A: Equipment
- B: Maintenance
- C: Fire Prevention
- D: Shop Safety
- E: First Aid



NOTE: The hours stated are for guidance and should be adhered to as closely as possible. However, adjustments must be made for rate of apprentice learning, statutory holidays, registration and examinations for the training establishment and Apprenticeship and Industry Training.

FIRST PERIOD TECHNICAL TRAINING
BAKER TRADE
COURSE OUTLINE

Due to the nature of the work of the Baker, it is imperative that safety be taught on a continuous basis throughout the entirety of this course.

Special emphasis should be placed on weak areas of theory and lab that are evident from progressive tests and examinations administered throughout the course. The time required for such examinations and testing shall be allowed for in each area of instruction.

TOPICS	OBJECTIVES **Upon successful completion of this unit the apprentice should be able to:**
SECTION ONE: ..... THEORY OF BAKING ..... 56 HOURS	
A. Related Activities	
1. Shop demonstrations	1. Observe demonstrations of production techniques.
2. Field trips	1. Participate in industry related field trips.
3. Examinations	1. Write examinations.
B. Introduction	
1. Program orientation	1. Describe the scope of the course. 2. Use the reference texts. 3. Apply trade terminology. 4. Describe Apprenticeship and Trade Certification (blue book, attendance policies). 5. Briefly outline of the history of baking. 6. Describe the scientific method and put it into practice in the bakery. 7. Participate in a team building exercise (e.g. co-operative learning, study skills, facility awareness).
C. Ingredient Theory	
1. Cereals, wheat and milling	1. Describe the source and processing methods of each ingredient.
2. Flour	1. Describe the composition and applications of flour.
3. Sugar	1. Describe the classifications and functions of sugars.

4.	Yeast	1.	Explain the functions and available marketing forms of yeast.
5.	Salt	1.	Explain the effects, functions and types of salt.
6.	Water	1.	Describe the functions, types, pH, etc. of water.
D.	**Methods Theory**		
1.	Straight dough method of breadmaking	1.	Describe the various methods of production.
2.	Chemically aerated products	1.	Describe the types and functions of chemical leavening agents.
3.	Blending method of cakemaking	1.	Describe appropriate mixing techniques.
4.	Short pastry	1.	State appropriate mixing techniques.
E.	**Theory Subjects**		
1.	Sweetdoughs	1.	Describe the techniques required for dough make-up.
		2.	State type, amount and functions of ingredients.
		3.	Describe the precautions needed for proof and bake.
		4	State how to refrigerate and freeze sweetdough and the advantages of doing so.
2.	Doughnut production (yeast and cake type)	1.	Discuss the ingredients used in doughnut production.
		2.	Describe the mixing methods.
		3.	Explain possible faults.
		4.	Describe the care and attention required to safely operate a doughnut fryer.
		5.	Explain how to maintain the frying fat or oil.
3.	Royal icing	1.	List the ingredients used in royal icing. 2. Describe the care of, correct mixing method and usage of royal icing.
4.	Sugar batter (creaming) and flour batter methods of cakemaking	1.	Describe the faults, causes and their avoidance.
		2.	Describe the mixing methods for sugar or flour batter.
5.	Breadmaking cycle	1.	List and describe the steps in the bread making cycle.

6.	Temperature calculations	1. Using a variety of methods, calculate the required water temperature to give precise dough temperature.
		2. Calculate machine friction.
		3. Calculate Fahrenheit/Celsius conversions.
7.	Pans and pan preparation	1. Describe the treatment of pans made of different metals used for baking.
		2. List and describe the different pan coatings available and when each one should be used.
		3. Describe the various liners which can be used and the purpose of each, (i.e. paper, cardboard and wood)
8.	Baking times and temperatures	1. List the factors which influence time and temperature of baking.
		2. State times and temperatures of baking for most common bakery products.
9.	Scientific method	1. Describe the importance of using timers, thermometers and measuring devices.

SECTION TWO:..... SHOP PRACTICES ..... 128 HOURS

STANDARD SHOP PRACTICES FOR FIRST, SECOND AND THIRD PERIOD

1.	Hand tools	1. Identify hand tools available for bakery use.
		2. Select, use and care for tools safely and correctly.
2.	Machinery	1. Identify bakery equipment available for bakery use.
		2. Select equipment appropriate for the task.
		3. Operate and clean bakery equipment safely and efficiently.
3.	Breadmaking methods	1. Produce doughs using the straight dough method.
4.	Scaling ingredients	1. Scale dry ingredients on top of each other.
		2. Measure liquids accurately.
		3. Demonstrate the use of a water meter.
5.	Tempering ingredients	1. Calculate and temper water to obtain a desired finished dough temperature.
6.	Mixing	1. Select the appropriate attachment and machine speed.
		2. Mix doughs, batters, pastes and icings to acceptable standards.

TOPIC		OBJECTIVES	FIRST PERIOD
7.	Scaling and dividing	1. Scale doughs and batters accurately by hand and machine.	
8.	Rounding	1. Round dough pieces for a variety of weights and types.	
9.	Intermediate proofing	1. Select the correct conditions for intermediate proof.	
		2. Determine completion of intermediate proof.	
10.	Moulding	1. Shape the dough piece according to the required end product by hand and machine.	
11.	Dough manipulation	1. Handle doughs to produce variety shapes such as variety dinner rolls, braided breads etc.	
12.	Sheeting doughs	1. Roll doughs with rolling pin and mechanical dough sheeters.	
		2. Assess correct thickness.	
13.	Washing and glazing	1. Brush product with various washes evenly to give desired effect.	
14.	Final proofing	1. Select the appropriate temperature and humidity for the proofer.	
		2. Determine the correct final proof for a variety of products.	
15.	Scoring or docking doughs	1. Cut the dough appropriately for the type of product and at the correct time to give the best results.	
16.	Baking	1. Select the correct baking temperature for the product.	
		2. Load the oven.	
		3. Use steam where appropriate.	
		4. Determine the correct degree of bake for each product.	
		5. Unload the oven.	
		6. Depan where required.	
17.	Frying	1. Select the correct frying temperature.	
		2. Deep fry a variety of products to the correct degree.	
		3. Use a variety of donut depositors.	
		4. Maintain proper frying fat level.	
18.	Cooling	1. Select the most appropriate conditions for cooling product.	
19.	Slicing	1. Maintain, clean and safely operate slicing equipment.	
20.	Cake making methods	1. Produce cakes using various production methods.	
21.	Pan preparation	1. Select and prepare appropriate pans for product.	

22.	Depositing	1.	Deposit by hand, scoop, pastry bag and machine.
23.	Spreading batters	1.	Spread batter evenly on baking sheets and in layer cake pans.
24.	Pastry making methods	1.	Prepare a variety of baked products using shortpaste/ sweetpaste.
25.	Rolling/sheeting pastry	1.	Roll out pastry with rolling pin and mechanical sheeter.
26.	Lining pans and foils with pastry dough	1.	Line pans such as pie foils and sheet pans with pastry dough.
27.	Blocking	1.	Block tarts and pies.
28.	Preparing fillings	1.	Produce a variety of uncooked fillings such as butter tart filling.
29.	Depositing and spreading fillings	1.	Deposit fillings and spread on pans.
30.	Cookie production	1.	Produce cookies of various types; cut out, roll out, bar, drop, piped, ice box and use machine depositor.
31.	Piping batters and doughs	1.	Select pastry bag and tube.
		2.	Make paper piping bag.
		3.	Pipe out batters and doughs of various consistencies into different shapes.
32.	Preparation of creams and icings	1.	Prepare the following: whipping cream, synthetic cream, a variety of butter creams, fondant, water icing and glazes, fudge and parfait icing, ganache, chocolate couverture, coating and piping chocolate.
33.	Splitting and layering	1.	Split and layer a variety of cakes.
		2.	Moisten and fill for flavour and texture.
34.	Coating	1.	Coat tops and sides of cakes with a variety of icings and pastes.
35.	Dipping	1.	Dip cake into a variety of jams, chocolate, fondant etc.
36.	Masking	1.	Mask using a variety of materials available for masking the sides of cakes to give different effects.
37.	Piping	1.	Using a variety of different decorating tips, pipe: a) lines b) writing (lettering) c) borders (shells, scrolls, barrels, etc.) d) flowers
38.	Special effects	1.	Use different techniques in decoration: a) stencils b) sugar decons

		c) sugar moulds d) airbrush to create unique effects e) edible transfers
39.	Freezing and retarding	1. Freeze both baked and unbaked products so as to maintain freshness.
		2. Defrost dough, batters and pastry and prepare them for bake off.
		3. Freeze and store baked product so as not to lose freshness.
		4. Use refrigerators and retarders effectively.
40.	Stock control	1. Maintain proper storage conditions: a) rotate stock (FIFO) b) storage c) refrigeration
41.	Test bake	1. Test bake a variety of products to verify the theory of raw materials.
42.	Follow directions	1. Produce products following formula and directions to a prescribed standard.
43.	Sanitation	1. Observe personal sanitation code.
		2. Wear clean clothing.
		3. Sanitise work areas, tools and machinery.
		4. Practice clean work habits.
44.	Suggested product list (but not limited to) for development of previous skills	
	a) bread	1. White pan, cross pan, sesame, multi grain, sandwich, raisin and fruit, cheese, 60% whole wheat, 100% whole wheat.
	b) crusty breads	1. Rye and French bread varieties.
	c) crusty and soft roll varieties	1. Crusty, Kaiser, knots, , cloverleaf, butter, parkerhouse, hamburger, wiener, submarine, onion, batch.
	d) sweet dough varieties	1. Cinnamon rolls, small sweetdough variety, coffee cakes, hot cross buns, fruit buns.
	e) yeast doughnut varieties	1. Sugared doughnuts, glazed doughnuts, long johns, twists, jelly filled doughnuts, kettle doughnuts.
	f) cake varieties	1. Cup cakes, layer cakes, pound cakes, sheet or slab cakes, sponge cakes, angel cakes, chiffon cakes.
	g) powder aerated products	1. Tea biscuits, cake doughnuts.
	h) short paste	1. Tarts, sheet lines, flans.

	i) pie varieties	1.	Fruit pies, cream pies, pecan pies, pumpkin pies, lemon meringue pies.
	j) decorated pastries	1.	Petit fours, petit four glacé, French pastries, strip fancies.
	k) decorated cakes	1.	Gateaux, torten, birthday cakes, special occasion cakes, black forest cakes.

SECTION THREE: ..... TRADE CALCULATIONS ..... 16 HOURS

A. Math

1.	Review	1.	Addition, subtraction, multiplication and division of whole numbers, fractions and decimals.
		2.	Percentage calculations.
2.	Formula calculations	1.	Calculate yields: given recipe, scaling weight and percentage loss.
		2.	Convert recipes to "Bakers Percentage" (ingredients based on flour being 100%).
		3.	Increase or decrease recipes to give a required yield. i.e. required/old = new.
3.	Temperature	1.	Calculate dough water temperature.
		2.	Calculate temperature conversions.

SECTION FOUR: ..... SANITATION ..... 24 HOURS

A. Introduction

1.	Outline course content.
2.	In-house sanitation practices.

B. Properties Of Food

1.	State the composition of common foods.
2.	Identify the moisture content; water activity (a/w).
3.	Define pH.

4. Describe the protective barriers, i.e. skin, hides.

5. List the normal micro-organisms found in raw or unprocessed foods.

C. Main Groups Of Micro-Organisms Associated With Food

1. Describe types and state sources of bacteria, yeast, moulds and parasites, etc.

2. Describe and state sources of pathogens.

3. Describe the growth and reproduction cycles of micro-organisms.

4. State the effects of: temperature, time, water activity, pH, oxygen and inhibitors upon micro-organisms.

D. Causes, Effects and Control of Food Borne Illness

1. Distinguish between infections and intoxications.

2. List the major organisms, i.e. salmonella, staphylococcus, parasites.

3. State the sources of micro-organisms, i.e. raw materials, humans, insects and rodents, equipment.

4. Describe the controls of contamination through elimination of cross contamination, personal hygiene/habits, pest and temperature controls.

5. Describe effective cleaning and sanitising techniques.

E. Quality Assurance/Quality Control

1. Describe and practice effective storage and inspection of raw materials.

2. Practice effective inventory control, (FIFO) first in first out.

3. Describe the purpose of H.A.C.C.P.

F. Regulations

1. Describe the role of the regulatory agencies.

TOPIC	OBJECTIVES	FIRST PERIOD

SECTION FIVE: ..... COMMUNICATIONS ..... 16 HOURS

A. Listening

1. Develop good listening skills.
2. Develop effective paraphrasing skills.

B. Two Way Communication

1. Be familiar with the nature of two way communication.
2. Be responsible for the message being heard.

C. One Way/Two Way Communication

1. Explain why communication in business is not always two way.
2. Discover the differences between one way and two way communications in the work environment.

D. Communication Barriers

1. Be aware of the many communication barriers.
2. Develop coping mechanisms to overcome barriers.

E. Customer Service

1. Be aware of the effects of customer service in the success or failure of small business.
2. Demonstrate effective customer relations.

F. Effective Telephone Techniques

1. Determine correct salutations and closures when answering the telephone.
2. Use efficient message taking techniques.

SECOND PERIOD TECHNICAL TRAINING
BAKER TRADE
COURSE OUTLINE

Due to the nature of the work of the Baker, it is imperative that safety be taught on a continuous basis throughout the course.

TOPICS	OBJECTIVES **Upon successful completion of this unit the apprentice should be able to:**
SECTION ONE: .....THEORY OF BAKING..... 56 HOURS	
A. Ingredients Theory	
1. Eggs 2. Milk 3. Fats and oils 4. Chemical leavening agents 5. Fruit and nuts	1. Describe the source and processing methods of each ingredient: a) state the composition of each ingredient b) exercise quality control c) explain the effects and functions of these ingredients in all products in which they are utilised d) state the safe and proper storage procedures for all of these ingredients
6 Creams, dairy and non-dairy 7. Emulsifiers (cake)	2. Describe the preparation and whipping of dairy and non-dairy creams: a) describe the special care needed in handling dairy and non-dairy creams before and after use b) list and describe the use of a variety of cream stabilisers c) describe the advantages and disadvantages of using non-dairy cream (including dietary considerations)
B. Methods Theory	
1. Sponge method of cake making 2. Emulsified sponge cake 3. Puff pastry 4. Choux pastry 5. Sour doughs 6. Pie pastry 7. No time dough method 8. Specific gravity	1. Describe the various production methods for: sponge cake, emulsified sponge cake, puff pastry, choux pastry, pie pastry, no time doughs and sour doughs: a) select and prepare ingredients required b) describe faults which may occur through incorrect quantity of ingredient, poor mixing method or improper handling and processing techniques 2. State the significance of specific gravity.

TOPIC	OBJECTIVES	SECOND PERIOD

C. Theory Subjects

1.	Rye flour and rye bread varieties	1. List and describe the characteristics of different rye flours. 2. Describe the characteristics which other ingredients contribute to rye doughs. 3. Describe the special mixing and handling of rye doughs including soaker doughs. 4. Describe the baking, use of steam and finishing of rye breads. 5. Describe the variety and use of sours. 6. Describe proper preparation of grains and cereals.
2.	Crusty variety bread and rolls	1. List and describe the varieties of crusty breads and rolls. 2. Describe the mixing and handling of crusty variety products. 3. Describe the baking, use of steam and finishing of crusty products.
3.	Cookies	1. List the different classifications of cookies. 2. List the common ingredients and state their effects on the finished product. 3. Describe the baking techniques. 4. Describe cookie faults and their prevention.
4.	Fruit cake	1. List the type of fruit normally used for fruit cake. 2. Describe and explain the preparation of the fruit. 3. Describe the baking procedure for fruit cake. 4. Describe faults in fruit cake. 5. Describe the best method of pan preparation for fruit cake.
5.	Humidity	1. Describe instruments used for determining relative humidity. 2. State the ideal conditions of humidity required throughout the breadmaking process. 3. Describe the symptoms and faults of incorrect humidity.

TOPIC	OBJECTIVES	SECOND PERIOD
6. Premixes and bases	1. Describe the terms "pre mix" and "base".	
	2. Develop formulas for both pre mixes and bases.	
	3. Explain the advantages and disadvantages of using pre mixes and bases.	
7. Packaging materials	1. Identify the different types of packaging available and its impact on merchandising and the environment.	
SECTION TWO:..... SHOP PRACTICES ..... 144 HOURS		
1. Hand tools	1. Be aware of the variety of hand tools available for bakery use.	
	2. Select, use and care for tools safely and correctly.	
2. Machinery	1. Be familiar with the machines available for bakeries.	
	2. Select equipment appropriate for the task.	
	3. Operate and clean bakery equipment safely and efficiently.	
3. Breadmaking methods	1. Produce doughs using the straight dough method: a) straight dough b) no time dough c) rye dough	
4. Scaling ingredients	1. Scale dry ingredients on top of each other.	
	2. Scale liquids.	
	3. Use a water meter.	
5. Tempering ingredients	1. Calculate and temper water to obtain a finished dough temperature.	
	2. Correctly temper other ingredients to observe formula requirements i.e. fondant, chocolate, etc.	
6. Mixing	1. Mix doughs, batters, pastes, icings using appropriate attachments and machines and develop each according to required specifications.	
	2. Select the appropriate machine speed.	
7. Scaling and dividing	1. Scale doughs and batters accurately by hand and machine.	
8. Rounding	1. Round dough pieces for a variety of weights and types.	
9. Intermediate proofing	1. Select the correct conditions for intermediate proof.	
	2. Determine completion of intermediate proof.	

TOPIC		OBJECTIVES	SECOND PERIOD
10.	Moulding	1.	Shape the dough piece according to the required end product.
11.	Dough manipulation	1.	Manipulate doughs to produce variety shapes such as variety dinner rolls, braided breads, etc.
12.	Sheeting doughs	1.	Roll doughs with rolling pin and mechanical dough sheeters.
		2.	Assess correct thickness.
13.	Washing and glazing	1.	Brush product with various washes evenly to give desired effect.
14.	Final proofing	1.	Select the appropriate temperature and humidity for the proofer.
		2.	Determine the correct final proof for a variety of products.
15.	Scoring or docking doughs	1.	Cut the dough appropriately for the type of product, and at the correct time to give the best results.
16.	Baking	1.	Select the correct baking temperature for the product.
		2.	Load the oven.
		3.	Use steam where appropriate.
		4.	Determine the correct degree of bake for each product.
		5.	Unload the oven.
		6.	Depan where required.
17.	Frying	1.	Select the correct frying temperature.
		2.	Deep fry a variety of products to the correct degree.
		3.	Use a variety of donut depositors.
		4.	Maintain proper frying fat level.
18.	Cooling	1.	Select the most appropriate conditions for cooling product.
19.	Slicing	1.	Maintain, clean and safely operate slicing equipment.
20.	Cake making methods	1.	Produce cakes using various production methods.
21.	Pan preparation	1.	Select and prepare the appropriate pans for product.
22.	Depositing	1.	Deposit by hand, scoop, pastry bag and machine.
23.	Spreading batters	1.	Spread batter evenly on baking sheets and in layer cake pans.
24.	Pastry making methods	1.	Prepare a variety of baked products using shortpaste/sweetpaste.

TOPIC	OBJECTIVES	SECOND PERIOD

25.	Rolling/sheeting pastry	1. Roll out pastry with rolling pin and mechanical sheeter. 2. Laminate dough as per puff pastry and Danish pastry. 3. Prepare fat for lamination.
26.	Lining pans and foils with pastry dough.	1. Line pans such as pie foils and sheet pans with pastry dough.
27.	Blocking	1. Block tarts and pies.
28.	Preparing fillings	1. Make a variety of uncooked fillings such as butter tart filling.
29.	Depositing and spreading fillings	1. Deposit fillings and spread on pans.
30.	Cookie production	1. Produce cookies of various types: cut out, roll out, bar, drop, piped, ice box and use machine depositor.
31.	Piping batters and doughs	1. Select pastry bag and tube. 2. Make paper piping bag. 3. Pipe out batters and doughs of various consistencies into different shapes.
32.	Preparation of creams and icings	1. Prepare the following: whipping cream, synthetic cream, a variety of butter creams, fondant, water icing and glazes, fudge and parfait icing, ganache, chocolate couverture, coating and piping chocolate.
33.	Splitting and layering	1. Split and layer a variety of cakes. 2. Moisten and fill for flavour and texture.
34.	Coating	1. Coat tops and sides of cakes with a variety of icings and pastes.
35.	Dipping	1. Dip cake into a variety of jams, chocolate, fondant, etc.
36.	Masking	1. Mask using a variety of materials available for masking the sides of cakes to give different effects.
37.	Piping	1. Using a variety of different decorating tips, pipe: a) lines b) writing (lettering) c) borders (shells, scrolls, barrels, etc.) d) flowers
38.	Special effects	1. Use different techniques in decoration: a) stencils b) sugar decons c) sugar moulds d) airbrush to create unique effects e) edible transfers

TOPIC	OBJECTIVES	SECOND PERIOD
39. Freezing and retarding	1. Freeze and retard both baked and unbaked products so as to maintain freshness.	
	2. Defrost dough, batters and pastry and prepare them for bake-off.	
	3. Freeze and store baked product so as not to lose freshness.	
	1. Use refrigerators and retarders effectively.	
40. Stock control	1. Maintain proper storage conditions: a) rotate stock (FIFO) b) storage c) refrigeration	
41. Test bake	1. Test bake a variety of products to verify the theory of raw materials.	
42. Follow directions	1. Produce product following given formula and directions to a prescribed standard.	
43. Sanitation	1. Observe personal sanitation code.	
	2. Wear clean clothing.	
	3. Sanitise work areas, tools and machinery.	
	4. Practice clean work habits.	
44. Premixes and bases	1. Produce pre-mixes and bases for later use.	
	2. Utilise premixes and bases from suppliers.	
45. Suggested product list (but not limited to) for development of previous skills a) bread	1. White pan, cross pan, sesame, multi grain, sandwich, raisin and fruit, cheese, 60% wholewheat, 100% wholewheat.	
b) crusty breads	1. Rye and French bread varieties.	
c) crusty and soft roll varieties	1. Crusty, Kaiser, knots, , cloverleaf, butter, parkerhouse, hamburger, wiener, submarine, onion, batch.	
d) sweet dough varieties	1. Cinnamon rolls, small sweetdough variety, coffee cakes, hot cross buns, fruit buns.	
e) yeast doughnut varieties	1. Sugared doughnuts, glazed doughnuts, long johns, twists, jelly filled doughnuts, kettle doughnuts.	
f) cake varieties	1. Cup cakes, layer cakes, pound cakes, sheet or slab cakes, sponge cakes, angel cakes, chiffon cakes and fruit cakes.	

g)	powder aerated products	1.	Tea biscuits, cake doughnuts.
h)	short paste	1.	Tarts, sheet lines, flans.
i)	pie varieties	1.	Fruit pies, cream pies, pecan pies, pumpkin pies, lemon meringue pies.
j)	decorated pastries	1.	Petit fours, petit four glacé, French pastries, strip fancies and bar cakes.
k)	decorated cakes	1.	Gateaux, torten, birthday cakes, special occasion cakes, black forest cakes.
l)	rye bread	1.	Light, dark, heavy, pumpernickel, sour, grain breads.
m)	puff pastry	1.	Vanilla strips, strudel, cream horns, cream crisps, eccles cakes.
n)	choux paste	1.	Eclairs, cream puffs, petit choux, swans, French crullers.
o)	wedding cakes	1.	Royal icing wedding cakes.

SECTION THREE: ..... TRADE CALCULATIONS ..... 16 HOURS

A. Math

1.	Costing	1.	Calculate ingredient cost, batch cost and gross profit.
		2.	Calculate mark up.
		3.	List and discuss overheads.
		4.	Determine selling price.
2.	Weights and measures	1.	Calculate formulas using Imperial System of measurement and differentiate from American.
		2.	Calculate formulas using S.I. metric.
		3.	Convert from Imperial to S.I. metric.
3.	Record keeping	1.	Explain inventory control and record maintenance.

SECTION FOUR: ..... SANITATION ..... 8 HOURS

A. Review Sanitation

1. Describe the characteristics of micro-organisms.

B. Food Preservation

1. Distinguish between pathogens and saprophytes.
2. Describe the methods of preservation, i.e. drying, pasteurisation, refrigeration, freezing, inhibitors, canning, vacuum packaging, (modified atmosphere packaging), irradiation.

C. Microbial Spoilage of Baked Goods

1. Outline the microbial hazards specifically related to baking, i.e. rope, mould and yeast, etc.
2. Describe the growth and methods of control of microbes.

D. Sanitation Control

1. Develop a sanitation checklist.

SECTION FIVE: ..... COMMUNICATIONS ..... 16 HOURS

A. Positive Attitudes

1. Demonstrate a positive attitude and positive thinking skills.

B. Self Confidence

1. Develop confidence in oneself and others.

C. Defensive Communications

1. Avoid defensive communication in the workplace.
2. Give and receive criticism effectively.

TOPIC	OBJECTIVES	SECOND PERIOD

D. Assertive Communications

1. Use several assertive communication techniques.

E. Dealing with the Angry Customer

1. Discuss how to deal with the angry customer.

F. Employee-Employer Relations

1. Discuss and understand the rights and expectations of the employer.

G. Job Seeking Skills

1. Design an effective covering letter and resume.
2. Be familiar with the job interview.

THIRD PERIOD TECHNICAL TRAINING
BAKER TRADE
COURSE OUTLINE

Due to the nature of the work of the Baker, it is imperative that safety be taught on a continuous basis throughout the entirety of this course.

TOPICS	OBJECTIVES **Upon successful completion of this unit the apprentice should be able to:**
SECTION ONE: ..... THEORY OF BAKING ..... 64 HOURS	
A. Ingredients Theory	
1. Starch 2. Functional dough improvers 3. Cocoa and chocolate 4. Gums and gelling agents	1. Describe the sources and processing methods of each ingredient: a) state the composition of each ingredient. b) exercise quality control. c) explain the effects and functions of these ingredients in all products in which they are utilised. d) state the safe and proper storage procedures for all of these ingredients.
B. Methods Theory	
1. Sponge and dough method of breadmaking 2. Mechanical dough development 3. Angel and chiffon cake production 4. Liquid ferment method of breadmaking (brew) 5. Laminated yeast dough (eg. danish and croissant) 6. Starch cooking (gelatinisation)	1. Describe the various methods of production: a) describe the selection and preparation of each ingredient required. b) state the percentage tolerance for each ingredient. c) describe faults which may occur through incorrect quantity of ingredient, poor mixing method or bad handling and processing techniques.
C. Production Techniques Theory	
1. Pie fillings	1. Describe the method of preparation for each type of pie filling. 2. List, describe and select appropriate ingredients.

	3. Balance formulas for fruit pies to meet cost or quality specifications.
	4. Evaluate end products, analyse any faults and recommend corrective action.
2. Laminated yeast dough products	1. List and describe the desirable qualities of laminated pastries and state the level of ingredients used.
	2. Describe mixing and laminating techniques.
	3. Describe proofing.
	4. Describe variations of finishing.
	5. Describe methods designed to ensure freshness and appearance when refrigerating or freezing before or after baking.
3. Icings and fillings	1. Differentiate between the different categories, formulas and methods of preparation.
	2. Explain the functions and relationships of the ingredients.
	3. Describe the icing most suited to a specific product.
	4. Explain how the characteristics of the icing may be changed to meet specific needs.
	5. Explain the different storage requirements.
4. Meringue	1. Differentiate between heavy and light meringue.
	2. Describe the preparation and mixing for each type of meringue.
	3. Describe the uses of meringue.
	4. Describe the faults in meringue and their causes.
5. Almond goods	1. Discuss the use and handling of almonds and almond products in the bakery.
	2. Describe the preparation of almond based products.
6. Savoury products	1. List a variety of savoury products produced in bakeries.
	2. Select ingredients appropriate for savoury fillings.
	3. Describe the preparation of different savoury fillings.

		4. Discuss sanitary precautions and regulations pertaining to the sale of savoury products.
		5. Discuss refrigeration and freezing of baked and unbaked savoury products.
7.	Mousse and gelatine products	1. Describe the preparation and use of mousse and gelatine products.

D. Theory Subjects

1.	Fermentation	1. State the functions of fermentation.
		2. List the enzymes involved and their specific action during fermentation.
		3. Describe the conditions which promote fermentation.
		4. Explain the use of fungal enzymes and their control.
		5. Describe the physical changes taking place in the dough.
2.	Staling	1. State the changes which take place during staling.
		2. Describe the best storage conditions to slow staling.
		3. List and describe how various additives slow staling.
3.	Bread faults	1. Evaluate bread using standard score sheets.
		2. List and describe the common faults which occur in fermented products.
		3. State the probable causes and suggest remedies or precautions which may be taken to eliminate faults.
4.	Refrigeration, retarding and freezing	1. State the normal operating temperatures for refrigerators, retarders and freezers.
		2. Determine those products which may or may not be refrigerated and/or frozen.
		3. Describe the preparation of each product for refrigeration, retarding, freezing.
		4. Describe the benefits of refrigeration and freezing.

		5. Describe the proper maintenance of refrigerators and freezers.
		6. Describe blast freezing and shock freezing techniques.
		7. Describe the correct method of thawing frozen products.
5.	Cake faults	1. Evaluate cakes using standard score sheet.
		2. List and describe common cake faults.
		3. Identify cake faults and their probable causes.
		4. Recommend corrective action.
6.	Recipe balance	1. Balance formulas for all types of bread and cakes.
7.	Sales, display and merchandising	1. Present products for display effectively.
		2. Adopt appropriate sales techniques.
		3. Develop marketing strategies.

SECTION TWO:..... SHOP PRACTICES ..... 120 HOURS

1.	Hand tools	1. Identify hand tools available for bakery use.
		2. Select, use and care for tools safely and correctly.
2.	Machinery	1. Identify bakery equipment available for bakery use.
		2. Select equipment appropriate for the task.
		3. Operate and clean bakery equipment safely and efficiently.
3.	Breadmaking methods	1. Produce doughs using various production methods: a) straight dough b) no time dough c) mechanical dough d) sponge and dough e) liquid ferment (brew dough)
4.	Scaling ingredients	1. Scale dry ingredients on top of each other.
		2. Measure liquids accurately.
		3. Demonstrate the use of a water meter.
5.	Tempering ingredients	1. Calculate and temper water to obtain a finished dough temperature.

TOPIC	OBJECTIVES	THIRD PERIOD
6. Mixing	1. Select the appropriate attachment and machine speed.	
	2. Mix doughs, batters, pastes and icings to acceptable standards.	
7. Scaling and dividing	1. Scale doughs and batters accurately by hand and machine.	
8. Rounding	1. Round dough pieces for a variety of weights and types.	
9. Intermediate proofing	1. Select the correct conditions for intermediate proof.	
	2. Determine completion of intermediate proof.	
10. Moulding	1. Shape the dough piece according to the required end product by hand and machine.	
11. Dough manipulation	1. Manipulate doughs to produce variety shapes such as variety dinner rolls, braided breads, etc.	
12. Sheeting doughs	1. Roll doughs with rolling pin and mechanical dough sheeters.	
	2. Assess correct thickness.	
13. Washing and glazing	1. Brush product with various washes evenly to give desired effect.	
14. Final proofing	1. Select the appropriate temperature and humidity for the proofer.	
	2. Determine the correct final proof for a variety of products.	
15. Scoring or docking doughs	1. Cut the dough appropriately for the type of product, and at the correct time to give the best results.	
16. Baking	1. Select the correct baking temperature for the product.	
	2. Load the oven.	
	3. Use steam where appropriate.	
	4. Determine the correct degree of bake for each product.	
	5. Unload the oven.	
	6. Depan where required.	
17. Frying	1. Select the correct frying temperature.	
	2. Deep fry a variety of products to the correct degree.	
	3. Use a variety of donut depositors.	
	4. Maintain proper frying fat level.	
18. Cooling	1. Select the most appropriate conditions for cooling product.	

TOPIC	OBJECTIVES	THIRD PERIOD
19. Slicing	1. Maintain, clean and safely operate slicing equipment.	
20. Cake making methods	1. Produce cakes using various production methods.	
21. Pan preparation	1. Select and prepare appropriate pans for product.	
22. Depositing	1. Deposit by hand, scoop, pastry bag and machine.	
23. Spreading batters	1. Spread batter evenly on baking sheets and in layer cake pans.	
24. Pastry making methods	1. Prepare a variety of baked products using shortpaste/ sweetpaste.	
25. Rolling/sheeting pastry	1. Roll out pastry with rolling pin and mechanical sheeter.	
26. Lining pans and foils with pastry dough	1. Line pans such as pie foils and sheet pans with pastry dough.	
27. Blocking	1. Block tarts and pies.	
28. Preparing fillings	1. Make a variety of uncooked fillings such as butter tart filling.	
	2. Produce pie filings which require cooking.	
	3. Use candy kettle and steam kettle.	
	4. Prepare meat fillings for savoury goods.	
29. Depositing and spreading fillings	1. Deposit fillings and spread on pans.	
30. Cookie production	1. Produce cookies of the various types, cut out, roll out or bar, drop, piped, ice box and use machine depositor.	
31. Piping batters and doughs	1. Select pastry bag and tube.	
	2. Make paper piping bag.	
	3. Pipe out batters and doughs of various consistencies into different shapes.	
32. Preparation of creams and icings	1. Prepare the following: whipping cream, synthetic cream, a variety of butter creams, fondant, water icing and glazes, fudge and parfait icing, ganache, chocolate couverture, coating and piping chocolate.	
33. Splitting and layering	1. Split and layer a variety of cakes.	
	2. Moisten and fill for flavour and texture.	
34. Coating	1. Coat tops and sides of cakes with a variety of icings and pastes.	
35. Dipping	1. Dip cake into a variety of jams, chocolate, fondant etc.	

TOPIC	OBJECTIVES	THIRD PERIOD
36. Masking	1. Mask using a variety of materials available for masking the sides of cakes to give different effects.	
37. Piping	1. Using a variety of different decorating tips; pipe: a) lines b) writing (lettering) c) borders (shells, scrolls, barrels, etc.) d) flowers	
38. Special effects	1. Use different techniques in decoration: a) stencils b) sugar decons c) sugar moulds d) airbrush to create unique effects e) edible transfers	
39. Modelling and moulding	1. Use a variety of techniques to model and mould, i.e. almond paste, sugar paste, chocolate.	
40. Freezing and retarding	1. Freeze and retard both baked and unbaked products so as to maintain freshness.	
	2. Defrost dough, batters and pastry and prepare them for bake off.	
	3. Freeze and store baked product so as not to lose freshness.	
	4. Use refrigerators and retarders effectively.	
41. Stock control	1. Maintain proper storage conditions: a) rotate stock (FIFO) b) storage c) refrigeration	
	2. Utilise premixes and bases from suppliers.	
42. Test bake	1. Test bake a variety of products to verify the theory of raw materials.	
43. Formula balance	1. Balance and test formulas.	
44. Follow directions	1. Produce products following formula and directions to a prescribed standard.	
45. Sanitation	1. Observe personal sanitation code.	
	2. Wear clean clothing.	
	3. Sanitise work areas, tools and machinery.	
	4. Practice clean work habits.	

TOPIC	OBJECTIVES	THIRD PERIOD

46.	Suggested product list (but not limited to) for development of previous skills	
	a) breads	1. White pan, cross pan, sesame, multi-grain, sandwich, raisin and fruit, cheese, 60% wholewheat, 100% wholewheat.
		2. Light, dark, heavy, pumpernickel, sour, grain breads.
		3. French, Vienna, Dutch, Baguettes.
	b) rolls	1. Crusty, Kaiser, knots, German, cloverleaf, butter, parkerhouse, hamburger, wiener, submarine, onion, batch, grain rolls.
	c) sweet dough	1. Cinnamon rolls, small sweetdough variety, coffee cakes, hot cross buns, fruit buns.
	d) yeast doughnuts	1. Sugared doughnuts, glazed doughnuts, long johns, twists, Bismarks, kettle doughnuts.
	e) Danish pastry and croissants	1. Danish variety, butterhorns, croissants.
	f) cakes	1. Cup cakes, layer cakes, pound cakes, sheet or slab cakes, sponge cakes, angel cakes, chiffon cakes.
	g) powder goods	1. Tea biscuits, cake doughnuts.
	h) short paste	1. Tarts, sheet lines, flans.
	i) pie dough	1. Fruit pies, cream pies, pecan pies, pumpkin pies, lemon meringue pies.
	j) puff pastry	1. Vanilla strips, strudel, cream horns, cream crisps, eccles cakes.
	k) choux paste	1. Eclairs, cream puffs, petit choux, swans, French crullers.
	l) savoury	1. Beef pies, chicken pies, Cornish pasties, steak and kidney pies, sausage rolls.
	m) decorated pastries	1. Petit fours, petit four glacé, French pastries, strip fancies, battenburg, almond macaroons, japonaise fancies, meringues.
	n) decorated cakes	1. Gateaux, torten, birthday cakes, special occasion cakes, German chocolate cakes, black forest cakes.
	o) wedding cakes	1. Royal icing wedding cakes, rolled fondant wedding cakes, buttercream wedding cakes.

TOPIC	OBJECTIVES	THIRD PERIOD

SECTION THREE: ..... EQUIPMENT AND SAFETY ..... 24 HOURS

A. Equipment

1. Ovens	1. Describe the background and development of ovens. 2. Describe the types of ovens and their suitability for various products, advantages and disadvantages. 3. State the different types of fuels available. 4. Describe heat transfer. Direct and indirect heating. 5. Describe heat measurement. 6. Describe the safe operation of ovens. 7. State the importance of oven maintenance. 8. Demonstrate lighting of ovens
2. Other bakery equipment	1. Describe the types and safe operation of a variety of bakery machines including (but not limited to): a) mixers b) sheeters c) dividers and rounders d) tote bag and silo systems e) dishwashers, freezers and fridges f) slicers

B. Maintenance

1. Identify the importance of:
   a) costs of downtime (checklist)
   b) areas of concern including
      i) electrical
      ii) mechanical
      iii) gas
      iv) plumbing
   c) preventive maintenance
   d) parts lists, drives, belts
   e) motors
   f) bearings
   g) shear pins
   h) lubricants
   i) reset switches

TOPIC	OBJECTIVES	THIRD PERIOD

C. Fire Prevention

1. Identify the following:
   a) safety procedures
   b) chemistry of fire
   c) classification of fires
   d) types of extinguishers (including deluge)
   e) bakery related fires
      i) ovens
      ii) fryers
      iii) venting systems
      iv) flour systems

D. Shop Safety

1. Demonstrate a knowledge of:
   a) Workers Compensation Act
   b) development of safe operating strategies
   c) responsibilities for safety
   d) identification of hazards
      i) stress
      ii) temperature extremes
      iii) health
      iv) equipment
      v) compressed air
      vi) W.H.M.I.S.
      vii) H.A.C.C.P.

E. First Aid

1. Compulsory modules

1. Complete an approved First Aid certificate course:
   a) principles of first aid
   b) artificial respiration
   c) choking
   d) wounds and bleeding
   e) shock, unconsciousness and fainting
   f) fractures

2. Elective modules

1. a) hand injury
   b) eye injury
   c) burns
   d) medical conditions

TOPIC	OBJECTIVES	THIRD PERIOD

SECTION FOUR: ..... FOODS AND NUTRITION ..... 16 HOURS

A. Introduction

1. Understand the scope of the course.
2. Understand the goal of good nutritional health.
3. Be familiar with the history of nutrition.
4. Demonstrate a knowledge of terms used.
5. Define nutrition.
6. Define food allergens and their consequences:
   a) cross contamination

B. Energy Requirements

1. State the three requirements for energy.
2. State the three main sources of energy.
3. Explain the relationship between energy intake and output.
4. Determine ideal weight and B.M.I. (Body Mass Index)
5. Discuss problems associated with lack of energy and excess calories.

C. Essential Nutrients

1. Carbohydrates
2. Fats
3. Proteins
4. Minerals
5. Vitamins
6. Fibre
7. Water

1. Describe the function and use of each nutrient.
2. State the sources of each nutrient.
3. Describe digestion and transportation of each nutrient.
4. State the problems with excess or lack of nutrient.

TOPIC	OBJECTIVES	THIRD PERIOD

D. Applied Nutrition

1. Recommended nutritional intake (RNI)	1. Be familiar with the two models.
2. Canada's Food Guide	1. Analyse a diet using these models.

E. Labelling of Bakery Products

1. Label according to federal requirements:
   a) allergy warning labels
2. Nutritional values:
   a) fibre
   b) cholesterol

SECTION FIVE: .....BUSINESS OPERATIONS..... 16 HOURS

A. Finance

1. List sources of available equity and operating capital.
2. Be familiar with banking procedure.
3. Describe day to day financial controls.

B. Production

1. Plan a production schedule.
2. Produce necessary job descriptions. 3. Allocate staffing hours.
3. Organise payroll and payroll records.

C. Regulations

1. Be familiar with federal and provincial taxation procedures.
2. Understand the W.C.B. regulations.
3. State the requirements for E.I. and C.P.P. deductions.
4. Be familiar with local business licensing and zoning regulations.

5. Understand required accounting procedures.
6. Package and label according to consumer affairs.
7. Understand company policies.

D. Equipment and Supplies

1. Determine necessary bakery equipment.
2. Produce a bakery layout.
3. Select appropriate stock.
4. Be familiar with stock control.

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